Listing of Claims:

1.   (Currently Amended) An image processing system for reduction of the noise and enhancement of edges in images of a sequence, comprising: a controller to:

~~means of~~ decompos~~ition of~~e a spatial image signal yielding slices of different content, the decomposition being based on pyramidal decomposition;

~~means of~~ temporally filter~~ing~~ one or more of the slices for differently filtering the slices according to the content, wherein one or more high frequency slices are filtered at a greater rate than one or more low frequency slices; and

~~means of~~ recompos~~ition of~~e the images of the sequence from at least the temporally filtered slices.

2.   (Currently Amended) The system of claim 1, wherein the ~~decomposition is performed using means of~~ pyramidal decomposition is one of Laplacian or Gaussian decomposition.

3.   (Currently Amended) The system of claim 1, wherein the ~~means of~~ temporal filtering comprises adaptive filtering.

4.   (Currently Amended) The system of claim 1, wherein the ~~means of~~ temporal filtering comprises motion compensation.

5.   (Currently Amended) The system of claim 1, wherein the ~~means of~~ temporal filtering comprises recursive adaptive filtering.

6.   (Currently Amended) The system of claim 1, further comprising a display device ~~imaging means~~ for displaying the images of the sequence.

7.   (Currently Amended) An ~~imaging apparatus comprising a suitably programmed computer or a special purpose processor having circuit means, which are arranged to~~

~~process images, to be used in a system as claimed in claim 1~~ computer-readable storage medium, comprising computer instructions for:

decomposing a spatial image signal yielding slices of different content, the decomposition being based on pyramidal decomposition;

temporally filtering one or more of the slices for differently filtering the slices according to the content, wherein one or more high frequency slices are filtered at a greater rate than one or more low frequency slices; and

recomposing the images of the sequence from at least the temporally filtered slices.

8.   (Currently Amended) A method of imaging comprising:~~computer program product comprising a set of instructions for carrying out an image processing to be used in a system as claimed in claim 1~~ decomposing a spatial image signal yielding slices of different content, the decomposition being based on pyramidal decomposition;

temporally filtering at least a portion of the slices for differently filtering the slices according to the content, wherein one or more high frequency slices are filtered at a greater rate than one or more low frequency slices; and

recomposing the images of the sequence from the temporally filtered slices and one or more unfiltered slices.

9.   (Currently Amended) The method of claim 8, wherein the temporal filtering comprises motion compensation~~A medical examination imaging apparatus having means for acquiring a sequence of medical images and having a viewing system for processing and for displaying said sequence of images according to claim 1~~.

10.   (New) The method of claim 8, further comprising applying Laplacian pyramid decomposition to perform the decomposition of the spatial image signal.

11.   (New) The method of claim 8, further comprising applying Gaussian pyramid decomposition to perform the decomposition of the spatial image signal.

12.   (New) The method of claim 8, further comprising applying adaptive temporal recursive filtering to perform the temporal filtering of the at least a portion of the slices.

13.   (New) The method of claim 8, wherein the temporal filtering comprises adaptive filtering.

14.   (New) The method of claim 8, further comprising displaying the recomposed images of the sequence.

15.   (New) The storage medium of claim 7, further comprising computer instructions for applying Laplacian pyramid decomposition to perform the decomposition of the spatial image signal.

16.   (New) The storage medium of claim 7, further comprising computer instructions for applying Gaussian pyramid decomposition to perform the decomposition of the spatial image signal.

17.   (New) The storage medium of claim 7, further comprising computer instructions for applying adaptive temporal recursive filtering to perform the temporal filtering of the at least a portion of the slices.

18.   (New) The storage medium of claim 7, wherein the temporal filtering comprises adaptive filtering.

19.   (New) The storage medium of claim 7, further comprising computer instructions for displaying the recomposed images of the sequence.

20.   (New) The storage medium of claim 7, wherein the temporal filtering comprises motion compensation.